

Date: Wednesday, 2/15/2006 3:41:41 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services

Drawing Name : 0H-58 SKIDTUBE ASSEMBLY

Job Number : 25813A

Estimate Number : 10475

P.O. Number : N/A

This Issue : 2/15/2006

S.O. No. : N/A

Prsht Rev. : NC

First Issue : N/A

Type : LANDING GEAR

Previous Run : 25371

Part Number : D058672041

Drawing Number : D2922 REV A1

Project Number : N/A

Drawing Revision : A1

Material : N/A

Due Date : 3/12/2006

Qty: 1 Um: E

Written By

SEE COMMENT BELOW

Checked & Approved By

A 06.02.16

Comment

Est Rev: C 02.06.28 Re-format; ECN 258 KJ

Est Rev: D 06.02.06 Added Dt8025 EC

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2620

Bent Tube 3" OD

B24497 BE 06-02-27 (1)

2.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

BE 06-02-27 (1)

2-Cut aft end of D2620 bent tube as per dwg D2922

123.59

BE 06-02-27 (1)

3-Drill pilot holes using drill jig DT8480 and DT8025 open to 0.312" dia.

BE 06-02-27 (1)

4-Drill holes for wearplates using DT 8487 Open to 0.297" dia.

BE 06-02-27 (1)

5-Drill holes for aft cap as per Dwg D2922 using drill jig DT 8025. Open using #6 Drill Bit

BE 06-02-27 (1)

7-Remove inner indexing ridge on aft end of skidtube as per Dwg D2922

BE 06-02-27 (1)

8-Deburr and Blow out all chips from inside the tube

BE 06-02-27 (1)

9-Weld D2794 cap as per QSI 004 and Dwg D2922. Use aluminum rod.

A/R

Aluminum Rod

M18839

/M19100

BE 06-02-27 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Job Number:



Seq. #:

Machine Or Operation:

Description :

3.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BE 06-03-01 (1)

4.0

D2923

Web



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2923 Web

B24771 BE 06-03-01 (1)

5.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2922(without cutting fluid)

BE 06-03-01 (1)

2-Countersink crossbolt spacer holes as per Dwg D2922(without cutting fluid)

BE 06-03-01 (1)

3-Deburr and Blow out all chips from inside the tube

BE 06-03-01 (1)

4-Bond D2923 web in place as per QSI 015. Ensure holes lineup

BE 06-03-01 (1)

A/R Sikaflex-291

M19597

Sikaflex expire date: 06-06-18

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

7.0

D2794

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Qty

Part Number

Description

Batch

1 D2794

Fwd Cap

B214588 BE 06-02-27 (1)

W/O:		WORK ORDER CHANGES					
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Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

D2649

Crossbolt Spacer



Comment: Qty.: 22.0000 Each(s)/Unit Total: 22.0000 Each(s)

Pick:

Qty Part Number Description Batch

22 D2649 Crossbolt spacer

BE 06-03-13 (1)

9.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Weld D2649 cross bolt spacers as per QSI 004 and Dwg D2922.(Remember to back drill each hole to 0.250" before welding the other side)

A/R Aluminum Rod

M18839 BE 06-03-13 (1)

3-Grind welds flush as per Dwg D2922

BE 06-03-14 (1)

4-Counterbore 5/16" x 0.750" deep as per Dwg D2922

BE 06-03-14 (1)

10.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

PD 06-03-16 / 06-03-16

11.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

FC 06-06-05 (1)

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

a.m. 06-06-05 (1)

13.0

D26483

Wearpad



Comment: Qty.: 5.0000 Each(s)/Unit Total: 5.0000 Each(s)

Pick:

Qty Part Number Description Batch

5 D2648-3 Wearpad

025904

a.m. 06-06-05 (1)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Job Number: 25813A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

14.0

D265615

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2656-15 Wearshoe

Batch

B9984

15.0

D265621

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2656-21 Wearshoe

Batch

B20917

16.0

D2924

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description

1 D2924 Wearshoe

Batch

B22595

17.0

MS27039108

Screw



Comment: Qty.: 50.0000 Each(s)/Unit Total : 50.0000 Each(s)

Pick:

Qty Part Number Description

50 MS27039-1-08 Screw

Batch

M16836

18.0

AN960JD10L

Washer



Comment: Qty.: 50.0000 Each(s)/Unit Total : 50.0000 Each(s)

Pick:

Qty Part Number Description

50 AN960JD10L Washer

Batch

m16235

a.m 06-06-05 (1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Job Number:



Seq. #:

Machine Or Operation:

Description :

19.0

ALS41032130

Insert



Comment: Qty.: 5.0000 Each(s)/Unit Total: ~~5.0000~~ Each(s) *50.0 4/10/06 06-07.*

Pick:

Qty Part Number Description Batch

50 ALS4-1032-130 Insert

or (see QSI 017)

M19213

20.0

D26511

Plug



Comment: Qty.: 20.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number Description Batch

20 D2651-1 Plugs

B25365

21.0

D26513

O-Ring



Comment: Qty.: 20.0000 Each(s)/Unit Total: 20.0000 Each(s)

Pick:

Qty Part Number Description Batch

20 D2651-3 O-Rings

B23491 x9

22.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2646 Aft Cap

A25387 B22587

23.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 MS27039-1-08 Screw

M18836 a.m 06-06-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DP Date: 05/06/07
 QA: N/C Closed: _____ Date: _____

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Job Number: 25813A

Part Number: D058672041

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
2 AN960JD10L Washer *m18235*

25.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Insert a drop of Sikaflex at insert hole before installing wearplates.

A/R Sikaflex-291 *M1026*

Sikaflex expire date: *06-11-06*

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2922

3-Install D2646 Aft Cap and seal with Sikaflex adhesive.Clean excess adhesive

A/R Sikaflex-291 *M1026*

Sikaflex expire date: *06-06-05*

a.m 06-06-05 ①

3- Wing Walk as per Dwg D2922 and QSI 005 4.4

M100652

Batch:

FC 06 06 05 ①

26.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

06-06-06 ①

27.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

n/a *PU*

28.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/06/06 ①
W. D. D. 06

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries



DESIGN RF	DRAWN BY RF	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED [Signature]	APPROVED [Signature]	DRAWING NO. D2922	REV. A SHEET 1 OF 2
DATE 99.10.14		TITLE OH-58 SKIDTUBE ASSEMBLY	SCALE NTS
A	99.10.14	NEW ISSUE	
A1	01.08.20	φ0.640 WAS φ0.625	

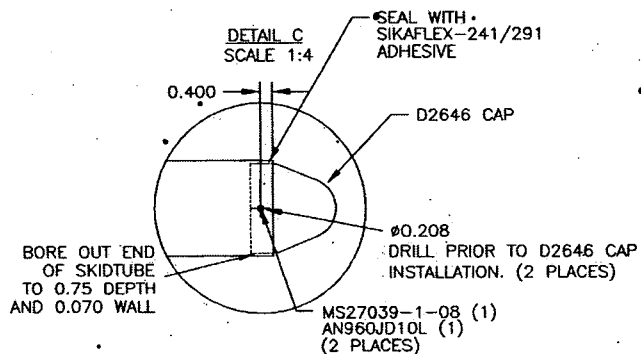
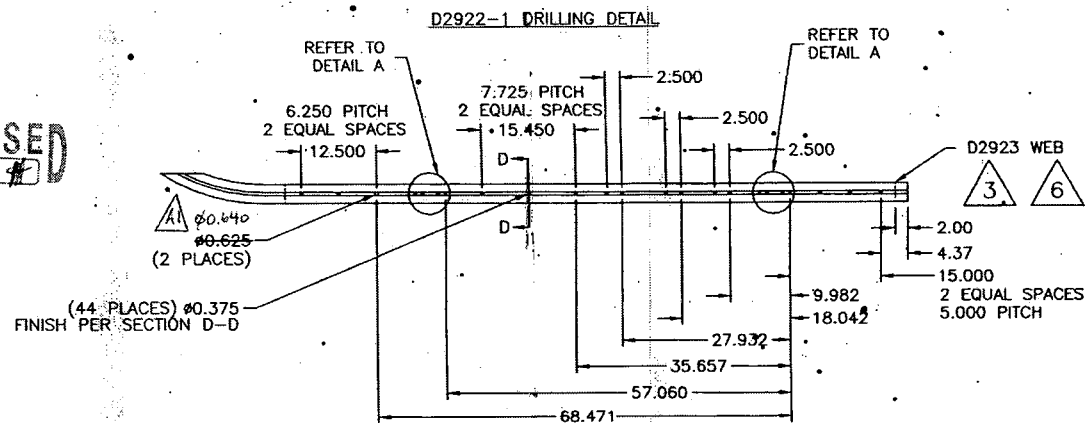
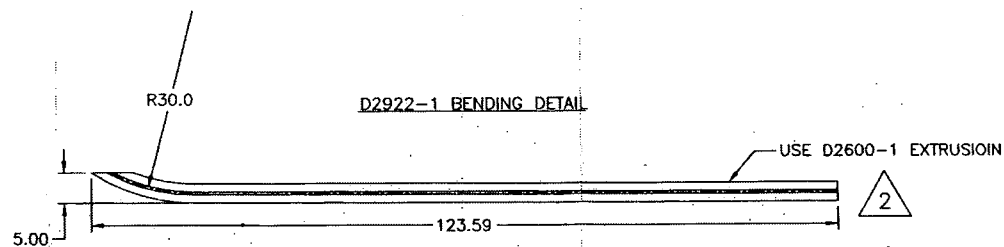
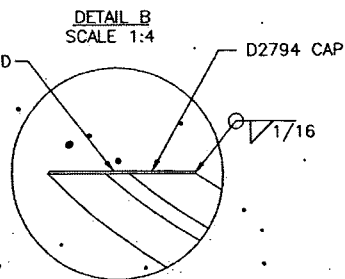
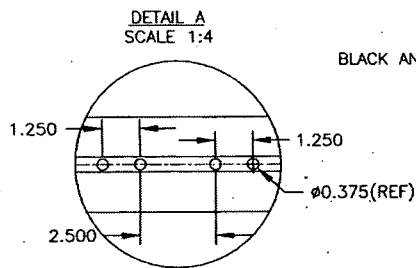
RELEASED
00.05.11

Qty	Part Number	Description
X	D2922-041	SKIDTUBE ASSEMBLY
*	D2600-1	EXTRUSION
1	D2646	AFT CAP
4	D2648-3	WEARPAD
1	D2648-5	WEARPAD
22	D2649	CROSS BOLT SPACER
20	D2651-1	PLUG
20	D2651-3	O-RING
1	D2656-15	WEARSHOE
1	D2656-21	WEARSHOE
1	D2794	CAP
1	D2923	WEB
1	D2924	WEARSHOE
50	AKS7-1032-130 or AKS4-1032-130 or ALS7-1032-130 or ALS4-1032-130	INSERT
52	AN960JD10L	WASHER
52	MS27039-1-08	SCREW

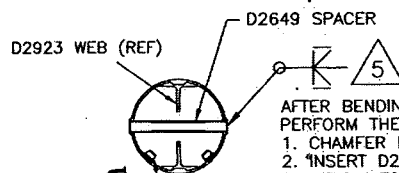
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) LENGTH OF D2600-1 EXTRUSION REQUIRED BEFORE BENDING = 160 INCHES.*
- 3) INSERT D2923 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8406 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL AKS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL MS27039-1-08 SCREWS AND AN960JD10L WASHERS IN ALL INSERTS. SEAL WITH SIKAFLEX-241/291.
- 5) WELDING TO BE DONE PER DART QSI 004.
- 6) FINISH:
ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2923 WEB
POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 0.50 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 7) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (20 PLACES).

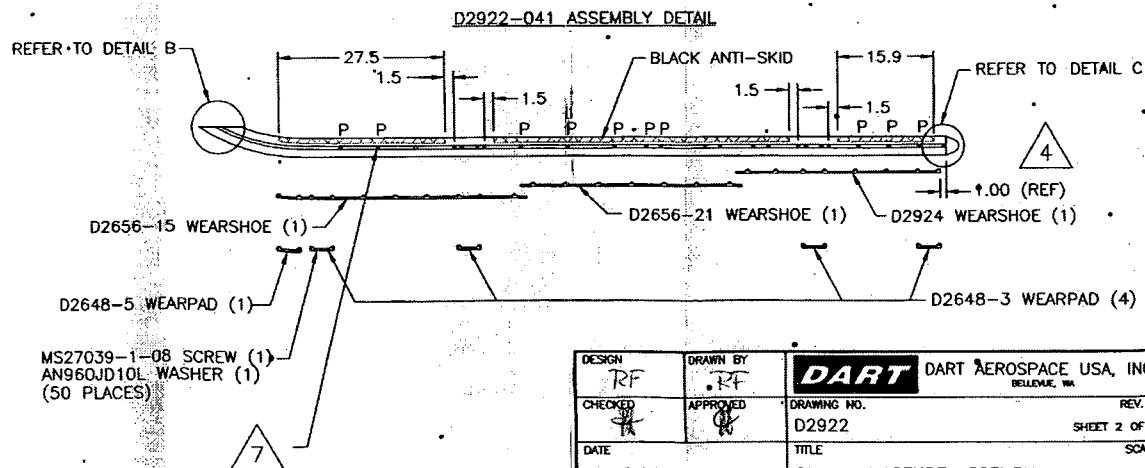
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 25813A



SECTION D-D
SCALE 1:4
FOR 0.375 HOLES ONLY



- AFTER BENDING AND DRILLING ASSEMBLY PERFORM THE FOLLOWING FOR 0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030 X 45°
 2. INSERT D2649 SPACER (22 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C-BORE D2649 SPACER TO 0.313 X 0.75 DEEP



RELEASED
00.05.11

NO. 25813A
WORK ORDER
SUBJECT TO AMENDMENT
WITHOUT NOTICE
UNCONTROLLED COPY
ENGINEERING
RETURN TO
DART-1032-130 (REF)
50 PLACES)

DESIGN RF	DRAWN BY RF	DART DART AEROSPACE USA, INC. BELLINGHAM, WA	
CHECKED RF	APPROVED RF	DRAWING NO. D2922	REV. A SHEET 2 OF 2
DATE 99.10.14	TITLE OH-58 SKIDTUBE ASSEMBLY	SCALE 1:20	

